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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,328	10/21/2003	Gilad Israel Elbaz	16113-001001	2189
<div>26192      7590      07/12/2007</div> <div>FISH &amp; RICHARDSON P.C.</div> <div>PO BOX 1022</div> <div>MINNEAPOLIS, MN 55440-1022</div>				
			<div>EXAMINER</div> <div>COUGHLAN, PETER D</div>	
			<div>ART UNIT</div> <div>2129</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE</div> <div>07/12/2007</div>	<div>DELIVERY MODE</div> <div>PAPER</div>

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/690,328

Applicant(s)

ELBAZ ET AL.

Examiner

Peter Coughlan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 May 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/21/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## Detailed Action

1. This office action is in response to an AMENDMENT entered May 18, 2007 for the patent application 10/690328 filed on October 21, 2003.
2. All previous Office Actions are fully incorporated into this Non-Final Office Action by reference.

### ***Status of Claims***

3. Claims 1-31 are pending.

### ***Claim Rejections - 35 USC § 112***

4. Claims 1, 8-14, 21-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims contain the words 'meanings' and/or 'concepts'. The specification fails to disclose the difference between the meanings of the two words. In Roget's New Millennium Thesaurus, First Edition (v 1.3.1), a synonym for 'concept' is 'meaning.'

These claims must be amended or withdrawn from consideration.

Claims 10, 13, 23, 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claim state the ability to 'determine a strength relationship' without an algorithm and a 'probability' engine without a specific algorithm which determines the 'probability.' These two claims state the use of two formulas which generate the 'strength' and 'probability' but the specification is silent on the composition of these formulas.

These claims must be amended or withdrawn from consideration.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The term "should be resolved" in claims 10, 13, 23, 26 is a relative term which renders the claim indefinite. The term "should be resolved" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. This phrase in claims 13 and 26 render the claims impotent based on lack of results.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 14-20, 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCandless in view of Jones. ('Web Advertising', referred to as **McCandless**; 'IndustryNet: A Model for Commerce on the World Wide Web', referred to as **Jones**)

Claim 1

McCandless teaches receiving a knowledge item (**McCandless**, p9, C1:15-29; 'Keyword' of applicant is equivalent to 'keywords' of McCandless.) identifying information to be used in interpreting the knowledge item, the information identified as having a predefined relationship with the knowledge item (**McCandless**, p8, C2:3-10; 'Identifying information' of applicant is equivalent to 'knowledge about an individual' of

McCandless.); determining at least one meaning of the identified information.

(**McCandless**, p8, C2:11-14; A keyword is used on a search and using personal information results are returned. 'Identified information' of applicant is equivalent to the search results of the query. 'Determining at least one meaning of the identified information' of applicant is equivalent to 'direct feedback' of an advertisement which is imbedded in the search results of McCandless.)

McCandless does not teach determining a plurality of meanings of the knowledge item selecting at least one of the plurality of meanings using the at least one meaning of the identified information; and recording the selected at least one of the plurality of meanings as an interpretation of the knowledge item.

Jones teaches determining a plurality of meanings of the knowledge item (**Jones**, p54, C3:6 through p55:3; 'Determining a plurality of meanings' of applicant is equivalent to 'find relevant articles by keyword' of Jones.) selecting at least one of the plurality of meanings using the at least one meaning of the identified information (**Jones**, p58, C3:26-55; 'Selecting at least one of the plurality of meaning' of applicant is accomplished by using a 'user model' of Jones. 'Meaning of the identified information' of applicant is equivalent to 'the agent asks the user if the information in the article was interesting.); and recording the selected at least one of the plurality of meanings as an interpretation of the knowledge item. (**Jones**, p58, C3:26-55; 'Recording the selected' of applicant is equivalent to 'the system stores every piece of information that the user chooses to read or ignore as a case' of Jones.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings

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of McCandless by using meanings of a keyword as a search term as taught by Jones to determine a plurality of meanings of the knowledge item selecting at least one of the plurality of meanings using the at least one meaning of the identified information; and recording the selected at least one of the plurality of meanings as an interpretation of the knowledge item.

For the purpose of widening the search parameters.

Claims 2, 15

McCandless teaches wherein the knowledge item is a keyword received as input to a search engine. (**McCandless**, p9, C1:15-29; 'Keyword' of applicant is equivalent to 'keyword' of McCandless.)

Claims 3, 16

McCandless does not teach wherein the identified information comprises articles.

Jones teaches wherein the identified information comprises articles. (**Jones**, p54, C3:6 through p55:3; "Article" of applicant is equivalent to 'article' of Jones.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of McCandless by using articles as a reference as taught by Jones to have wherein the identified information comprises articles.

For the purpose of widening the results using given search parameters.

Claims 4, 17

McCandless teaches wherein the articles comprise an advertisement from an advertiser who has bid on the knowledge item. (**McCandless**, p9, C1:15-29; 'Advertiser who has bid' of applicant is equivalent to 'advertisers that bids the highest price' of McCandless.)

Claims 5, 18

McCandless teaches wherein the articles further comprise a web page associated with the advertisement. (**McCandless**, p8, C3:38 through p9, C1:14; 'Web page' of applicant is equivalent to 'page' of McCandless. 'Advertisement' of applicant is equivalent to 'banner' of McCandless.)

Claims 6, 19

McCandless does not teach wherein the identified information further comprises data.

Jones teaches wherein the identified information further comprises data. (**Jones**, p55, C1:4-30; 'Data' of applicant is equivalent to 'specifications' of Jones.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of McCandless by the results of the search can be raw data as well as taught by Jones to have wherein the identified information further comprises data.

For the purpose of widening the results using given search parameters.



Claims 7, 20

McCandless teaches wherein the related data comprises cost per click data associated with the advertisement. (**McCandless**, p9, C1:15-29; 'Cost per click' of applicant is equivalent to 'cost per thousand(CPM)' of McCandless.)

Claim 14

McCandless teaches program code for receiving a knowledge item (**McCandless**, p9, C1:15-29; 'Keyword' of applicant is equivalent to 'keywords' of McCandless.); program code for identifying information to be used in interpreting the knowledge item, the information identified as having a predefined relationship with the knowledge item (**McCandless**, p8, C2:3-10; 'Identifying information' of applicant is equivalent to 'knowledge about an individual' of McCandless.); program code for determining at least one meaning of the identified information. (**McCandless**, p8, C2:11-14; A keyword is used on a search and using personal information results are returned. 'Identified information' of applicant is equivalent to the search results of the query. 'Determining at least one meaning' of applicant is equivalent to 'direct feedback' of an advertisement which is imbedded in the search results of McCandless.)

McCandless does not teach program code for determining a plurality of meanings of the knowledge item; program code for selecting at least one of the plurality of meanings using the at least one meaning of the identified information; and program code for recording the selected at least one of the plurality of meanings as an interpretation of the knowledge item.

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Jones teaches program code for determining a plurality of meanings of the knowledge item (**Jones**, p54, C3:6 through p55:3; 'Determining a plurality of meanings' of applicant is equivalent to 'find relevant articles by keyword' of Jones.); program code for selecting at least one of the plurality of meanings using the at least one meaning of the identified information(**Jones**, p58, C3:26-55; 'Selecting at least one of the plurality of meanings' of applicant is accomplished by using a 'user model' of Jones. 'Meaning of the identified information' of applicant is equivalent to 'the agent asks the user if the information in the article was interesting. '); and program code for recording the selected at least one of the plurality of meanings as an interpretation of the knowledge item. (**Jones**, p58, C3:26-55; 'Recording the selected' of applicant is equivalent to 'the system stores every piece of information that the user chooses to read or ignore as a case' of Jones.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of McCandless by using the meanings of keyword to broadening the search parameters as taught by Jones to have program code for determining a plurality of meanings of the knowledge item; program code for selecting at least one of the plurality of meanings using the at least one meaning of the identified information; and program code for recording the selected at least one of the plurality of meanings as an interpretation of the knowledge item.

For the purpose of broadening the search parameters.

Claim 27

McCandless teaches receiving a keyword (**McCandless**, p9, C1:15-29; 'Keyword' of applicant is equivalent to 'keywords' of McCandless.); identifying information to be used in interpreting the keyword (**McCandless**, p8, C2:3-10; 'Identifying information' of applicant is equivalent to 'knowledge about an individual' of McCandless.), the information identified as having a predefined relationship with the keyword (**McCandless**, p8, C2:3-10; 'Identified information' is equivalent to search results of a query of McCandless); determining at least one meaning of the identified information. (**McCandless**, p8, C2:11-14; A keyword is used on a search and using personal information results are returned. 'Identified information' of applicant is equivalent to the search results of the query. 'Determining at least one meaning' of applicant is equivalent to 'direct feedback' of an advertisement which is imbedded in the search results of McCandless.)

McCandless does not teach selecting at least one of a plurality of meanings of the keyword using the at least one meaning of the identified information.

Jones teaches selecting at least one of a plurality of meanings (**Jones**, p58, C3:26-55; 'Selecting at least one of the plurality of meaning' of applicant is accomplished by using a 'user model' of Jones. 'Meaning of the identified information' of applicant is equivalent to 'the agent asks the user if the information in the article was interesting.) of the keyword using the at least one meaning of the identified information. (**Jones**, p54, C3:6 through p55:3; 'Determining a plurality of meanings' of applicant is equivalent to 'find relevant articles by keyword' of Jones.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the

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teachings of McCandless by determining the meaning of a keyword as taught by Jones to select at least one of a plurality of meanings of the keyword using the at least one meaning of the identified information.

For the purpose of establishing a broader search.

McCandless teaches matching the keyword to content associated with a web page (**McCandless**, p9, C1:15-29; 'Keyword' of applicant is equivalent to 'keyword' of McCandless. 'Web page' of applicant is disclosed by a (web) search of McCandless.); matching the keyword to an advertisement based at least in part on the selected at least one meaning (**McCandless**, p9, C1:15-29; 'Matching the keyword to an advertisement' of applicant is illustrated by the 'ad is activated by keywords used in a search' of McCandless.); selecting the advertisement to associate with the content (**McCandless**, p8, C3:38 through p9, C1:14; 'Selecting the advertisement' of applicant is equivalent to 'banner ad is selected' of McCandless.); and outputting the selected advertisement. (**McCandless**, p8, C3:38 through p9, C1:14; 'outputting the selecting the advertisement' of applicant is equivalent to 'banner ad is selected and presented' of McCandless.)

Claim 28.

McCandless teaches wherein the identified information comprises text of advertisements associated with advertisers who have bid on the keyword. (**McCandless**, p9, C1:15-29; 'Keyword' of applicant is equivalent to 'keyword' of McCandless. 'Text of advertisements' of applicant is equivalent to 'unique impression is a single ad' of McCandless.)

Claim 29

McCandless does not teach wherein the identified information comprises destination web pages associated with the advertisements.

Jones teaches wherein the identified information comprises destination web pages associated with the advertisements. (**Jones**, p56, C1:9-14; 'Destination web pages' of applicant is equivalent to 'hyperlink to product details directly from an on-line advertisement' of Jones.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of McCandless by using web pages as results as taught by Jones to have wherein the identified information comprises destination web pages associated with the advertisements.

For the purpose of using web pages as a source of advertising.

Claim 30

McCandless teaches wherein the identified information comprises other keywords bid on by advertisers. (**McCandless**, p9, C1:15-29; 'Keyword' of applicant is equivalent to 'keywords' of McCandless.)

Claim 31

McCandless teaches wherein the identified information comprises search results associated with the keyword. (**McCandless**, p9, C1:15-29; 'Identified information' of

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applicant is equivalent to results of a search. The results of a search is based on a keyword.)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-13 and 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of McCandless and Jones in view of Lang. (U. S. Patent 5867799, referred to as **Lang**)

Claims 8, 21

McCandless and Jones do not teach wherein determining the plurality of meanings of the knowledge item further comprises processing the knowledge item to determine any known associated concepts.

Lang teaches wherein determining the plurality of meanings of the knowledge item further comprises processing the knowledge item to determine any known

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associated concepts. (**Lang**, C11:8-17; To 'determine any known associated concepts' of applicant is achieved by 'probabilistic techniques ... the probability ... satisfies the user's information need' of **Lang**.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the combined teachings of McCandless and Jones by making the connection from meanings to concepts as taught by **Lang** to determining the plurality of meanings of the knowledge item further comprises processing the knowledge item to determine any known associated concepts.

For the purpose of using the concepts to broaden the advertising horizon.

Claims 9, 22

McCandless and Jones do not teach wherein the plurality of meanings correspond to a plurality of associated concepts and wherein selecting the at least one of the plurality of meanings comprises selecting at least one of the associated concepts.

**Lang** teaches wherein the plurality of meanings correspond to a plurality of associated concepts and wherein selecting the at least one of the plurality of meanings comprises selecting at least one of the associated concepts. (**Lang**, C11:8-17, C3:33-43; 'Informons' of **Lang** is equivalent to information filtering in which entities of information relevant to the user or having 'meanings' of applicant. Thus the 'meanings' of applicant is equivalent to the 'informons' of **Lang**. The correspondence between meanings and concepts of applicant is disclosed by 'the probability that a particular term or concept, that occurs in an informon or that the informon satisfies the user's

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information need' of Lang.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the combined teachings of McCandless and Jones by selecting a meaning and corresponding concept as taught by Lang to have wherein the plurality of meanings correspond to a plurality of associated concepts and wherein selecting the at least one of the plurality of meanings comprises selecting at least one of the associated concepts.

For the purpose of establishing a starting point of advertising marketing

#### Claims 10, 23

McCandless and Jones do not teach establishing a probability for each of the plurality of meanings that the knowledge item should be resolved to the one of the plurality of meanings; determining a strength of relationship between each of the plurality of meanings and the at least one meaning of the identified information; and adjusting the probability for each of the plurality of meanings based on the strengths, wherein the adjusted probability is used in selecting the at least one of the plurality of meanings.

Lang teaches establishing a probability for each of the plurality of meanings that the knowledge item should be resolved to the one of the plurality of meanings (Lang, C11:18-65; 'Establishing a probability' of applicant is disclosed by the formula  $p(H|D)$  of Lang.); determining a strength of relationship between each of the plurality of meanings and the at least one meaning of the identified information (Lang, C11:18-65; 'Determining the strength' of applicant is disclosed by the formula  $-\log(p(D|H))$  –



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$\log(p(H))$ ' of Lang.); and adjusting the probability for each of the plurality of meanings based on the strengths, wherein the adjusted probability is used in selecting the at least one of the plurality of meanings. (**Lang**, C11:18-65; 'Adjusting the probability' of applicant is illustrated by the fact the formula  $-\log(p(D|H)) - \log(p(H))$  can be maximized. This maximization of the formula of Lang is equivalent to 'adjusting the probability' of applicant.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the combined teachings of McCandless and Jones by using a relationship value between meanings for a possible solution as taught by Lang to establish a probability for each of the plurality of meanings that the knowledge item should be resolved to the one of the plurality of meanings; determining a strength of relationship between each of the plurality of meanings and the at least one meaning of the identified information; and adjusting the probability for each of the plurality of meanings based on the strengths, wherein the adjusted probability is used in selecting the at least one of the plurality of meanings.

For the purpose of using an associated meaning based on a probability for finding a possible solution.

Claims 11, 24

McCandless and Jones do not teach wherein the plurality of meanings comprise a weighted vector of concepts.

Lang teaches wherein the plurality of meanings comprise a weighted vector of concepts. (**Lang**, C20:35-50; 'Weighted vector of concepts' of applicant is equivalent to

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'the vector Ms, that are related to any concept C, may be looked up' of Lang.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the combined teachings of McCandless and Jones by using the industrial standard of weighted vectors as taught by Lang to have wherein the plurality of meanings comprise a weighted vector of concepts.

For the purpose of using established methods and algorithms which use weighted vectors for established reliable results.

Claims 12, 25

McCandless and Jones do not teach wherein the plurality of meanings comprise related clusters of words.

Lang teaches wherein the plurality of meanings comprise related clusters of words. (Lang, C20:35-50; A 'related cluster of words' of applicant can be seen as a vector 'Weighted vector of concepts' of applicant is equivalent to 'the vector Ms, that are related to any concept C, may be looked up' of Lang.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the combined teachings of McCandless and Jones by using clustering techniques as taught by Lang to have wherein the plurality of meanings comprise related clusters of words.

For the purpose of using distance between meaning of words to establish clusters of words based on a similar meaning.

Claims 13, 26

McCandless and Jones do not teach establishing a probability for each of the plurality of meanings that the knowledge item should be resolved in part to the one of the plurality of meanings; and establishing a probability for the meaning of the identified information that the knowledge item should be resolved in part to the meaning of the identified information.

Lang teaches establishing a probability for each of the plurality of meanings that the knowledge item should be resolved in part to the one of the plurality of meanings (**Lang**, C12:11-17; 'Establishing a probability for each of the plurality of meanings' of applicant is equivalent to 'each statistic can be computed for each concept' of Lang.); and establishing a probability for the meaning of the identified information that the knowledge item should be resolved in part to the meaning of the identified information. (**Lang**, C12:26-45; 'Establishing a probability for the meaning of the identified information' of applicant is disclosed by the formula ' $p(t_{i,d} = () \mid 1_d[c_k])$ ' of Lang.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the combined teachings of McCandless and Jones by using a probability result to find a possible solution as taught by Lang to establish a probability for each of the plurality of meanings that the knowledge item should be resolved in part to the one of the plurality of meanings; and establishing a probability for the meaning of the identified information that the knowledge item should be resolved in part to the meaning of the identified information.

For the purpose of a finding a result to the problem.

***Response to Arguments***

5. Applicant's arguments filed on May 18, 2007 for claims 1-31 have been fully considered but are not persuasive.

6. In reference to the Applicant's argument:

This response is filed by Applicants' new representative, at the instruction of the assignee, in accordance with Rules 1.34 and 1.33. A formal power of attorney will be submitted as soon as it is available.

In response to the final office action dated October 23, 2006, claims 1-3, 6, 8-13, 14-16, 19, 21-26 and 27-31 are being amended. This includes the claims 1, 14 and 27 which are independent claims. As such, claims 1-31 are pending. Favorable consideration of the amended claims is requested.

Claim 1 is amended to recite that it is directed to a method for interpreting a knowledge item. This is supported by the present disclosure, for example in the description of the knowledge item engine 124 and the information locator 134, the information processor 136, the knowledge item processor 135 and the meaning processor 136. [Paragraphs 0020-0025]. For example, it is described that the word "apple" can be interpreted to associate with a computer company or with a fruit. [0033-0036].

Claim 1 is also amended to recite "identifying information to be used in interpreting the knowledge item, the information identified as having a predefined relationship with the knowledge item". This is supported for example by the description of the information locator 134. [0024].

Claim 1 is also amended to recite determining at least one meaning of the identified information. This is supported for example by the description of block 210 in Figure 2, where at least one related meaning is determined. [0035].

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Claim 1 is also amended to recite determining a plurality of meanings of the knowledge item. This is supported for example by the description of block 206 in Figure 2, where the keyword is processed by the knowledge item processor 135. [0032].

Claim 1 is also amended to recite selecting at least one of the plurality of meanings using the at least one meaning of the identified information. This is supported for example by the description of block 212 in Figure 2, in which the meaning of the keyword is determined by the meaning processor 137. [0036].

Claim 1 is also amended to recite recording the selected at least one of the plurality of meanings as an interpretation of the knowledge item. This is supported for example by the description of block 214 in Figure 2, where the meaning of the keyword is associated with the keyword and stored. [0044].

Similar amendments are made in independent claim 14, which is a corresponding computer-program product claim, and in independent claim 27, which is a method claim. Corresponding changes are also made in the dependent claims. No new matter is added.

Applicants thank the Examiner for the suggestions regarding claim language made in the office action. [Office Action page 2]. The above amendments have been made along the lines of the suggestions. However, Applicants are not conceding that the claims were deficient.

Claims 1-31 were rejected under § 101 as being directed to non-statutory subject matter. This rejection is rendered moot by the above amendments. However, Applicants point out that claim 1 and its dependents are drawn to a method of interpreting a knowledge item. Moreover, the method recites "recording the selected at least one of the plurality of meanings as an interpretation of the knowledge item". Thus, one result accomplished by the method is the recording of such an interpretation. This is useful in that the recorded interpretation can be output for some purpose, or reused to avoid performing another interpretation. It is also tangible and concrete in that it is specifically the "the selected at least one of the plurality of meanings" that is being recorded, as opposed to, say, some other meaning or something that is not a meaning of the knowledge item. Similarly, independent method claim 27 recites outputting of the advertisement. Independent claim 14, moreover, is a computer-readable medium that contains code for recording the selected meaning. Applicants submit that the claims 1-31 as amended qualify as statutory subject matter under § 101. However, Applicants are not conceding that the rejection has merit.

Examiner's response:

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Due to recent changes concerning rejections using 35 U.S.C. §101, the Examiner is now allowed to use the specification to determine a practical application. Paragraphs, 0004 through 0006 illustrate methods in Internet advertising which employ keywords, demographic information, category of web page to target clients and their needs. The Examiner withdraws the rejection.

7. In reference to the Applicant's argument:

Claims 1-9, 11, 12, 14-22, 24 and 25 were rejected under § 102(b) as being anticipated by U.S. 5,848,396 ("Gerace"). Claims 10, 13, 23 and 26-31 were rejected under § 103(a) as being unpatentable over Gerace in view of U.S. 5,878,223 ("Becker"). These rejections are rendered moot by the above amendments. However, Applicants will point to the following differences between the present subject matter and the two references.

The present claim 1 is directed to interpreting a knowledge item. The claim recites identifying information to be used in the interpretation, and the determination of a meaning of such information. Moreover, the claim recites that the knowledge item is determined to have a plurality of meanings, and that at least one of these meanings is selected using the meaning of the identified information. The selected meaning is recorded as an interpretation of the knowledge item. Applicants submit that Gerace and Becker, alone or in combination, do not disclose or suggest an interpretation method where information is identified to perform the interpretation, and in which at least one of a plurality of meanings is selected using a meaning of the information.

Gerace is directed to method and apparatus for determining behavioral profile of a computer user. Gerace Title. A psychographic profile is formed by recording computer activity and viewing habits of the end user. Gerace Abstract. As such, Gerace does not disclose interpretation of a knowledge item, or selection among several meanings using a meaning of identified information.

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The portions of Gerace cited in the office action are not to the contrary. The Examiner cited to searchable categories as allegedly showing a knowledge item. Gerace 22:58-65. But Gerace does not disclose or suggest that the searchable categories are to be interpreted, nor does Gerace record an interpretation of any of them, as would be required by the present claims.

The Examiner cited to a page display as allegedly showing the receipt of related information. Gerace 9:40-51. But the display of the search results is not information to be used in interpreting the searchable categories, nor does it have a predefined relationship with it, as would be required by the present claims.

The Examiner cited to previously accessed information as allegedly showing a related meaning. Gerace 11:13-23. But a directory of numbers that the user has previously accessed is not a meaning that Gerace uses to choose between a plurality of meanings of a knowledge item, nor does it correspond to a meaning of the page display, as would be required by the present claims.

The Examiner cited to information generated when the user logs on as allegedly showing a knowledge item meaning. Gerace 6:46-57. But logon information is not a meaning that Gerace determines among multiple meanings in the interpretation of a knowledge item, nor is the previously accessed information used to determine the logon information, as would be required by the present claims.

Independent claims 14 and 27 have similar language to the portions of claim 1 discussed above. Accordingly, Gerace does not teach or suggest at least the aspects of these independent claims. It therefore cannot be said that Gerace anticipates the amended claims or renders them obvious.

Becker discloses a system and method for predictive caching of information pages. Becker Title. Becker was cited as allegedly showing the establishment of probabilities. As such, the Examiner did not contend that Becker discloses any aspect of the independent claims, and Applicants submit that Becker does not do so. However, Applicants are not conceding that the characterization of Becker in the Office Action is correct.

Examiner's response:

Gerace and Becker are no longer used as reference art in this Office Action.

McCandless and Jones are used for all of the independent claims. 'Keyword' of

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applicant is equivalent to 'keywords' of McCandless. (**McCandless**, p9, C1:15-29)

'Identifying information' of applicant is equivalent to 'knowledge about an individual' of McCandless. (**McCandless**, p8, C2:3-10) A keyword is used on a search and using personal information results are returned. 'Identified information' of applicant is equivalent to the search results of the query. 'Determining at least one meaning of the identified information' of applicant is equivalent to 'direct feedback' of an advertisement which is imbedded in the search results of McCandless. (**McCandless**, p8, C2:11-14;)

'Determining a plurality of meanings' of applicant is equivalent to 'find relevant articles by keyword' of Jones. (**Jones**, p54, C3:6 through p55:3) 'Selecting at least one of the plurality of meaning' of applicant is accomplished by using a 'user model' of Jones.

'Meaning of the identified information' of applicant is equivalent to 'the agent asks the user if the information in the article was interesting. (**Jones**, p58, C3:26-55) 'Recording the selected' of applicant is equivalent to 'the system stores every piece of information that the user chooses to read or ignore as a case' of Jones. (**Jones**, p58, C3:26-55)

Office Action stands.

### ***Examination Considerations***

8. The claims and only the claims form the metes and bounds of the invention.

"Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in



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the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has the full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

9. Examiner's Notes are provided to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and spirit of compact prosecution. However, and unless otherwise stated, the Examiner's Notes are not prior art but link to prior art that one of ordinary skill in the art would find inherently appropriate.

10. Examiner's Opinion: Paragraphs 8 and 9 apply. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

### **Conclusion**

11. The prior art of record and not relied upon is considered pertinent to the applicant's disclosure.

- U. S. Patent 5937392: Alberts
- U. S. Patent 5895454: Harrington
- U. S. Patent 5796952: Davis
- U. S. Patent 5948061: Merriman
- U. S. Patent 5949419: Domine
- ‘Determinants of successful website design: relative importance and recommendations for effectiveness’: Gehrke
- ‘A consumption model for targeted electronic advertising’: Dedrick
- ‘Web-Analysis: stripping away the hype’: Monticino
- ‘Transforming business in the marketspace’: Dutta
- ‘A framework for managing web information: current research and future directions’: Liang

12. Claims 1-31 are rejected.

***Correspondence Information***

13. Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner Peter Coughlan, whose telephone number is (571) 272-5990. The Examiner can be reached on Monday through Friday from 7:15 a.m. to 3:45 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor David Vincent can be reached at (571) 272-3080. Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,  
Washington, D. C. 20231;

Hand delivered to:

Receptionist,  
Customer Service Window,  
Randolph Building,  
401 Dulany Street,  
Alexandria, Virginia 22313,  
(located on the first floor of the south side of the Randolph Building);

or faxed to:

(571) 272-3150 (for formal communications intended for entry.)


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Peter Coughlan

6/26/2007



JOSEPH P HIRL  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2100